

**STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION**

Illinois Commerce Commission	:	
On its Own Motion	:	
	:	20-NOI-01
Notice of Inquiry Regarding	:	
Energy Affordability	:	

**Initial Comments of Elevate Energy**

Elevate Energy submits these Comments in Response to the Illinois Commerce Commission’s March 18, 2020 Notice of Inquiry (NOI). The Commission initiated this proceeding “evaluating what information is available regarding the affordability of utility services, what the current state of the affordability of utility services is, and the impact on affordability of current programs and measures.” (NOI at 3). We appreciate the opportunity to give our thoughts on these crucial topics and thank the Commission for its interest in hearing from stakeholders. We look forward to participating in this process and helping to shape our mutual understanding of utility affordability in Illinois.

Elevate Energy is a 140-employee 501(c)(3) not-for-profit corporation with a mission of *Smarter Energy Use for All*. We design and implement programs that lower costs, protect the environment, and ensure the benefits of clean energy, water, and healthy housing reach those who need them most. These include energy efficiency programs for affordable multifamily rental housing, public housing, nonprofit commercial buildings; hourly electric pricing programs; and solar energy programs, among others.

Here, Elevate Energy comments on the questions posed by the NOI to all interested parties as they relate to electric and gas utilities. Elevate Energy is joining with the Metropolitan Planning Council to file separate comments related to water and

stormwater utilities. We have organized our comments in the order that questions appear in the NOI and, while we have not responded to every question, our comments are numbered to correspond to the NOI.

## **C. Definitions**

### **1) How should the following terms be defined? Are there federal or other state standards or guidelines that more clearly define these terms?**

#### **a) Affordability**

The term ‘affordability’ itself is not clearly defined, though there are several established thresholds for affordability. These include the definition of ‘energy burden’ discussed in C.2. below. However, given the renewed and urgent importance of home internet access in the COVID-19 pandemic, Elevate Energy recommends that the ICC establish a holistic ‘household utility affordability’ definition via a stakeholder process that would include energy, water, sewer, and basic telecommunications and internet expenses.

#### **b) Low-Income**

Elevate recommends that a household be considered “low-income” if the annual household income is less than 80 percent of the Area Median Income for the metropolitan statistical area or county. The income limits for Area Median Income are set annually by the US Department of Housing and Urban Development (HUD) and are published at <https://www.huduser.gov/portal/datasets/il.html>

#### **e) Disconnection**

Elevate recommends that disconnection be defined in terms of the functional availability of service to the customer and that any break in service for nonpayment or other non-outage reason should be considered a disconnection. While we realize that there may also be a need for more technical, grid- or system-based definitions, we feel that a functional definition from the perspective of the customer can help the Commission and utility understand and respond to customers' situations.

#### **f) Displacement**

We are not aware of a standard definition for displacement but would recommend that the concept be defined to include situations where a resident is unable to move or are evicted because of a loss of utility service. For example, where a resident cannot begin a lease at a new home because the utility will not start their service because of past nonpayment or other issues.

#### **g) Reconnection**

Elevate recommends that reconnection be defined in terms of the functional availability of service to the customer after a period of disconnection. As with 'disconnection,' a functional definition from the perspective of the customer can help the Commission and utility understand and respond to customers' situations.

#### **h) Vulnerable Customers**

Elevate Energy is not aware of any guidelines for defining 'vulnerable customers.' However, we do believe that the concept and term could be useful so long as it were well defined. There are tradeoffs between assigning broad and narrow definitions for the term, which may be best dealt with in the context of the purpose for which the term

is used. We would recommend considering both affordability and demographic factors when deciding on a definition for this term and recommend considering the following groups, at an absolute minimum, when deciding a definition for the term:

- People who may be at risk of disconnection
- People who may be at risk of having difficulty keeping up with bill payments
- People who are at risk of taking actions such as keeping their home at an unhealthy temperature or making tradeoffs on other critical bills such as food, rent, and medicine to be able to pay their utility bills
- Those with disabilities or health conditions that would be exacerbated by the stress of not being able to afford utility bills
- Those with disabilities or health conditions who need medical equipment or household conditions that rely on utilities. Just one example would be asthma patients who need to stay cool or who have electronic equipment that helps with breathing
- People who are members of or live in communities that have been harmed by historic economic disinvestment or environmental injustice
- People who are affected by several vulnerability risk factors, but at lower levels, leading to an accumulation of risks that would make them vulnerable despite not falling into any single category of vulnerability.

**2) Are there other undefined terms that are critical to understanding utility service affordability and/or the ability of customers to receive essential**

**levels of electric, natural gas, water and sewer services and, if so, how should such terms be defined?**

There are several terms that can be helpful to understanding utility affordability: energy burden, utility burden, energy justice, energy insecurity, and housing affordability. However, because the literature uses a variety of definitions for these terms, care must be taken to define them whenever they are used.

The terms ‘energy burden’ or ‘utility burden’ are often used to describe a situation where a household spends a high percentage of its income for energy bills. Thresholds vary, but one common threshold for defining an energy burdened household is that it spends 6% of annual household income on energy utilities. The threshold for a ‘severely burdened’ household also varies but is often set at 10% of income for energy utilities. Other variations of the definition of ‘utility burden’ may include thresholds for utility costs that include some combination of energy, water, and sewer costs.

Similarly, the definitions of ‘energy insecurity’ and ‘energy justice’ vary widely. While the concepts can be helpful, the literature has not settled on definitions.

A household’s ability to afford its utilities can be closely linked to its ability to afford its housing. Of the terms mentioned here, this is the most well defined. HUD sets housing affordability at 30% of income.<sup>1</sup>

## **F. Credit and Collections Practices**

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<sup>1</sup> See Christopher Herbert, Alexander Hermann, and Daniel McCue, *Measuring Housing Affordability: Assessing the 30 Percent of Income Standard*, Joint Center for Housing Studies Harvard University, September 2018, [https://www.jchs.harvard.edu/sites/default/files/Harvard\\_JCHS\\_Herbert\\_Hermann\\_McCue\\_measuring\\_housing\\_affordability.pdf](https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Herbert_Hermann_McCue_measuring_housing_affordability.pdf)

**1) Please identify and describe best collection practices and how existing collection practices can be improved.**

As a general principle, Elevate Energy believes that collection practices for utility services, which are critical to survival and health, should not harm people's credit. If people are having trouble paying for their utilities, they are struggling to maintain financial stability. Harming their credit does nothing to repay the utility and makes it even more difficult for the resident to regain stability. Instead, utilities should work with customers to help them pay their bills and stabilize their finances.

Positive credit reporting when customers request it could be helpful in assisting financially stable but low-wealth customers to build their financial resources.

**3) Within the following subjects as they relate to affordability, please identify and describe practices/concepts that are currently working well, areas that can be improved and ideas/plans for improvement:**

**a) Communications/Outreach**

Communications and outreach to customers should prioritize the building of trust between the utility and customers. Our organization regularly talks to customers who question the value of utility programs that would help them because of their past experiences with the utility, rumors, or just a lack of insight into why their bills are so high.

### **b) CSR tools to identify consumer budget needs/challenges**

We believe these tools could be helpful to the utility. However, they should not be used to deny assistance to customers who may not be flagged by the system. Even moderate-income households can be energy insecure<sup>2</sup>, and incomes can be so variable that households with overall moderate incomes can experience great hardship at times.<sup>3</sup> Consequently, utilities should not make assumptions about households based on their CSR tools, but should use them to add value to processes that are driven by data provided by the customer.

### **c) Encouraging payment**

Elevate Energy does not believe that harming a customers' credit score encourages payment.

### **d) Referrals to Community Services**

Coordination of referrals across the utility and assistance agencies could be very helpful. For example, if someone is struggling with their bills, they need easy and seamless access to the full suite of programs that may benefit them, from hardship programs and bill payment plans to energy efficiency and solar programs that could help lower their bills.

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<sup>2</sup> U.S. Energy Information Administration, Residential Energy Consumption Survey, *One in Three U.S. Households Faced Challenges in Paying Energy Bills in 2015*.

<https://www.eia.gov/consumption/residential/reports/2015/energybills/>

<sup>3</sup> Jonathan Morduch and Rachel Schneider, U.S. Financial Diaries Project, *Spikes and Dips: How Income Uncertainty Affects Households*, <https://www.usfinancialdiaries.org/issue1-spikes>

## **G. Energy Efficiency Measures**

### **1) What current utility energy efficiency programs aimed at increasing the affordability and/or the ability of customers to receive essential levels of electric services are available and how effective are they?**

A wide variety of energy efficiency programs are available that help increase affordability by reducing the cost needed to power, heat, and cool homes and other buildings. They are generally effective, although Illinois' gas efficiency programs are much smaller than those in leading states and our residents would benefit greatly from a legislative increase in those programs' targets and corresponding budgets.

In our experience as an energy efficiency program implementer, we often see split incentives between tenants and landlords, which have several effects. The most discussed effect is, of course, where the landlord controls the equipment used in the apartment, but the tenant pays the resulting bills. This results in little incentive for the landlord to undergo building retrofits or to replace inefficient equipment. However, Illinois' housing stock contains a variety of heating and cooling configurations, with many buildings in the Chicago area having common heating that is included in the rent. In this situation, the landlord has a significant incentive to reduce heating costs through efficiency. However, many landlords do not pass any of the savings from efficiency retrofits along to tenants. This presents a lost opportunity for tenants to realize the value of energy efficiency retrofits. Direct installation-type programs, in which energy efficient devices or light bulbs are installed directly into tenants' units, thus directly benefitting the tenants' electric bills, can relieve this situation.



**2) What energy efficiency information, surveys or other data are available that address the effect of utility energy efficiency program participation on affordability and/or the ability of customers to receive essential levels of electric services?**

The American Council for an Energy-Efficient Economy (ACEEE) recently published a report describing the current state of non-residential energy efficiency offerings that support low-income communities.<sup>4</sup> The tie between nonprofit organizations and income eligible customers is clear. Low-income communities across Illinois are struggling to overcome pressing and difficult circumstances. Individuals and families in these communities rely on social service agencies and nonprofit organizations to stay afloat financially, socially, and in terms of health and well-being. These organizations are the frontlines for meeting the needs of the most vulnerable populations. Increasing energy affordability for nonprofit organizations has direct impacts on their ability to provide essential services to low-income residents.

**3) With respect to energy efficiency technology penetration:**

**a) How many customers continue to use incandescent light bulbs?**

We estimate that about 40% of current residential unit retrofits in the income eligible multifamily sector include incandescent-to-LED retrofits. In addition, in our experience there are almost always some incandescent bulbs in the boiler room of multifamily and nonprofit buildings. Most buildings have a mix of incandescent

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<sup>4</sup> Ariel Dreihobl and Kate Tanabe, Extending the Benefits of Nonresidential Energy Efficiency to Low-Income Communities, November 2019, Report U1910, available at: <https://www.aceee.org/research-report/u1910>

bulbs and CFLs. Very few income-eligible multifamily or nonprofit buildings are LED-only at this point.

**b) How many customers have advanced thermostats?**

Our experience suggests that less than 3% of multifamily and nonprofit-owned buildings have advanced thermostats, and advanced thermostats are extremely rare in buildings with central heating. Note that we define advanced thermostats as those that are programmable as well as 'smart' thermostats.

**c) What existing energy efficiency technologies, if more widely deployed, can increase affordability and/or the ability of customers to receive essential levels of electric services?**

The most important existing technologies to improve tenant affordability in rental housing are refrigerators, lighting, and air conditioners. In addition, we believe that many baselines in the Technical Reference Manual may not reflect current conditions, and thus the savings calculations for the energy efficiency programs may not support some upgrades that could lead to improved affordability. In general, the baselines in the Technical Reference Manual do not always coincide with what is installed, since baselines are often connected to building codes, but many buildings do not meet current code, especially in the income eligible market. This is also true in commercial building markets. Buildings that are owned or operated by nonprofit organizations often represent traditionally underserved building types that have not adopted energy efficiency technologies at the same rates as other commercial building types. Therefore, baseline assumptions based on code compliance underestimate the savings potential of nonprofit buildings.

**4) What changes could be made to utility energy efficiency programs to make them more effective at increasing the affordability and/or the ability of customers to receive essential levels of electric services?**

We recommend increasing rebates to fully incentivize energy efficient replacements for appliances, such as refrigerators and air conditioners, that use the most energy in apartments. Trade-in programs for old inefficient equipment could also be effective.

We recommend increasing incentive levels and technical assistance available to nonprofit customers who require additional support to complete energy efficiency upgrades. Nonprofit organizations are hard-to-reach with traditional energy efficiency program strategies and marketing tactics. Like low-income housing providers, they face many barriers to participation. However, unlike income-eligible residential buildings, nonprofits who serve income-eligible individuals through their commercial spaces cannot access the same increased energy efficiency resources. This has created a gap in the market that could be addressed through providing additional resources, rate structures, or dedicated programs for nonprofit commercial buildings.

**7) What changes could be made to weatherization programs to make them more effective at increasing the affordability and/or the ability of customers to receive essential levels of electric services?**

There are not currently dedicated weatherization programs for nonprofit commercial buildings. This presents an opportunity for significant electric and natural gas savings for nonprofits that serve low-income individuals.

## **H. Distributed and Community Solar**

**1) What distributed and community solar programs are currently available to customers that increase affordability and/or the ability of customers to receive essential levels of electric services, how effective are the programs at achieving these objectives, and what changes could make the programs more effective?**

### **The Illinois Adjustable Block Program (Illinois Shines)**

The Adjustable Block Program (ABP), also called Illinois Shines, was established by the FEJA Energy Jobs Act (FEJA) and launched in January of 2019 to support the development of new photovoltaic (PV) distributed generation (DG) and community solar projects in Illinois. Through this legislation, the ABP receives funding from ratepayers, collected by Illinois electric utilities. These funds support the development of solar projects through the purchase of renewable energy certificates (RECs) for qualified projects. The ABP has specific targets for the number of REC purchased annually and uses a funding block structure to set the REC values for new generation facilities. Because ABP facilitates contracts with solar developers and utilities to pay for RECs over 15 years, the funding collected by and paid for by utilities must be managed in a way that balances contracts for new and existing installations and payments over time.

As of September 2020, the ABP has funded more than 17,000 projects with an installed solar capacity of more than 640 megawatts (MW)<sup>5</sup>. This is enough to power more than 95,000 homes<sup>6</sup> and includes 111 community solar projects, 323 large DG projects, and nearly 15,000 small DG projects smaller than 10 kilowatts installed capacity. With the inclusion of utility scale solar installations, Illinois has grown to be ranked the 13<sup>th</sup> in the nation for solar jobs<sup>7</sup> and is rising quickly in terms of installed capacity. Currently, however, funds have been exhausted for community solar and large DG incentives in the form of RECs awarded by the ABP. Only about 20 MW of capacity remains for the small DG block.

### **The Illinois Solar for All Program**

The Illinois Solar for All program (ILSFA) was also established by FEJA and launched in May of 2019 to support the development of new PV DG and community solar projects specifically to serve low- and moderate-income and environmental justice communities in Illinois. The Illinois Power Agency has contracted with Elevate Energy to be the program administrator for the ILSFA program. The comments made here are those of Elevate Energy and are based on our experience with the program and with other solar projects for low- and moderate-income households and nonprofit organizations both in Illinois and in other states. These comments should not be construed as being the opinions of the Illinois Power Agency.

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<sup>5</sup> Illinois Adjustable Block Program Dashboard, *Current Status of Illinois Adjustable Block Program Blocks*, <https://illinoisabp.com/dashboard-home-2/>

<sup>6</sup> Solar Energy Industries Association, *Illinois Solar*, <https://www.seia.org/state-solar-policy/illinois-solar>

<sup>7</sup> Illinois Solar Energy Association, *Illinois Solar Industry Data*, <https://www.illinoissolar.org/illinoissolardata>

ILSFA provides greater access to the clean energy economy for low-income communities through incentives (also via REC purchases) that help make solar installations more affordable and result in measurable savings for participants. Unlike the ABP, ILSFA funding is established as an annual budget by the Illinois Power Agency through its Long-Term Renewables Resource Procurement Plan, which allocates approximately \$30 million per year for ILSFA across all sub-programs via a combination of funds from ratepayer collected funds and the Renewable Energy Resource Fund (RERF).

It is estimated by the end of 2020, ILSFA will have funded approximately 120 projects with an installed capacity of more than 22 MW.<sup>8</sup> Program requirements differ from ABP in important ways. Unlike ABP, ILSFA requires that income-eligible customers see a savings of at least 50%, that all participating vendors use job trainees from FEJA funded workforce development programs, and that important consumer protections are ensured.

Below is a discussion of current issues and policy considerations related to ILSFA:

### **Disproportionate resources allocated to low- and moderate-income households**

Of the \$230 million collected by utilities each year to help fund renewables through the purchase of renewable energy credits, only \$10 million will directly serve low- and moderate-income households through Illinois Solar for All, even though these households make up nearly half of all Illinois households. Additional funding for ILSFA

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<sup>8</sup> Illinois Solar for All Program Dashboard, <https://www.illinoisifa.com/project-dashboard/>

comes from the RERF, which no longer collects Alternative Compliance Payments and is limited to existing funds. By the end of 2020, the ABP will have issued approximately \$400 million in incentives to general market solar development, while ILSFA will have issued less than \$60 million. Because 30% of Illinois households are low- or moderate-income, to better align funding proportionately, it can be argued that 30% of ongoing funding should be allocated to ILSFA. It is anticipated that utilities will collect about \$230 million per year from ratepayers to fund renewables programs. To reach equitable funding, at least 30% (about \$70 million annually) would need to go to low-and moderate-income renewable programs rather than just the current \$10 million per year allocated to ILSFA.

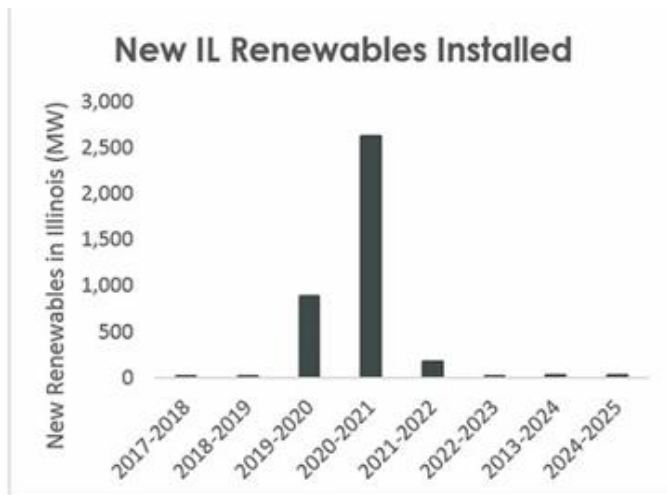
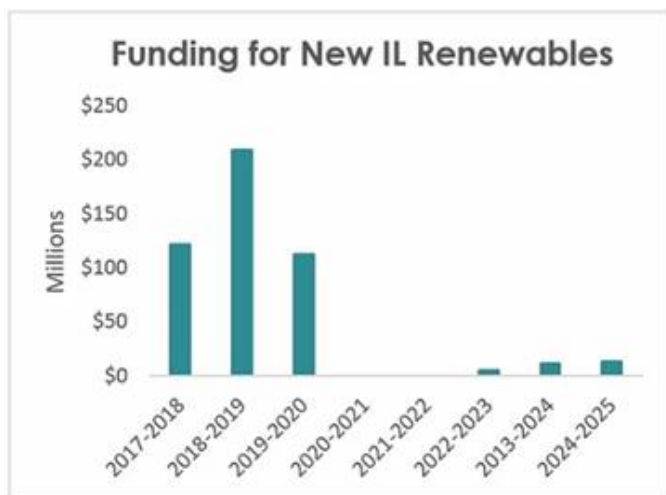
### **Illinois Solar for All is the only program that guarantees customer savings**

Illinois Solar for All is unique in that it provides guaranteed savings for eligible participants, whereas the ABP has no such provision and allows the market to determine the level of savings. For example, typical savings for residential customers (percent paid for energy generated from solar versus the value received) using the most common model, a power purchase agreement, is about a 10% savings off the standard electricity rate. This is true for both community solar subscribers and rooftop behind-the-meter systems. ILSFA, however, ensures qualified participants see at least a 50% savings, with many receiving 100% free solar (depending on the project and solar developer model). This critical requirement, along with workforce development and other consumer protections, makes ILSFA unique and important. When solar PV systems can be owned directly by customers, the savings is typically much better over

time. But, the upfront costs, credit requirements, and technical understanding are all barriers for many households. ILSFA works to eliminate these barriers.

### **The funding cliff threatens compliance with RPS goals and jobs already created**

Illinois will face a critical gap in its ability to continue funding the development of new solar projects and meet its near-term Renewable Portfolio Standard (RPS) obligations. Because the ABP is required to pay for RECs for qualified projects over 15 years, the annual dollars collected by utilities on behalf of ratepayers and allocated to purchase these RECs must balance RECs for new generations and all ongoing REC obligations. Consequently, funding beyond 2020 for new generation through the ABP just isn't there. All new funds are already accounted for to pay for existing projects. The chart from the Solar Energy Industries Association below provides a stark image of what to expect.



This has implications not just for the state meeting its RPS obligation of 25% renewable energy by 2025, but it may also have a devastating impact on the solar industry and solar jobs in Illinois. This is exacerbated by the Covid-19 pandemic, with



solar developers – especially small, minority-owned businesses - already threatened with closing their doors. This has been referred to as the Illinois “Funding Cliff.” Existing statutory funding from FEJA no longer exists and must come from new legislation to mitigate the near- and long-term risks to the Illinois solar industry and the RPS.

### **Improvements to the Illinois Renewable Portfolio Standard**

The current structure of the Renewable Portfolio Standard and legislation enabling the ABP and ILSFA create barriers and limitations that could stifle further growth of renewables in Illinois resulting in the “funding cliff” described above. With the current structure, there will likely not be enough money to pay existing REC contracts beyond 2021. Current rules require unused funds to be refunded to ratepayers, rather than rolled over to pay future obligations. RERF funds could be tapped into. But this would ensure no new projects are funded and would take money directly from Illinois Solar for All.

If these unused funds are refunded, all future obligations will rely solely on what funds come in each year, currently estimated at \$230 million. In addition, the current model funds a portion of projects upfront, which will likely create uneven spikes of funding and make paying future obligations unsustainable and wholly eliminate any new project funding. A legislative correction is needed to address these issues. Without these changes, Illinois will not meet its RPS obligation of 25% renewable capacity by 2025. The current installed capacity is projected to be 2,500 MW after currently funded projects come online. This would represent just 8% of Illinois capacity.

## **The struggle to more effectively integrate energy efficiency with solar programs**

FEJA states that one of the objectives of the Illinois Solar for All Program is “to integrate, through interaction with stakeholders, with existing energy efficiency initiatives.” Although as Program Administrator we are continuing to extend awareness of solar programs to energy efficiency programs, there are barriers. First, because ILSFA and Illinois Shines are both market-driven programs, solar developers and installers are the participants’ primary point of contact. Although some organizations are mission driven and look to help clients reduce their energy burden with energy efficiency before moving on to installing solar, there is a disincentive for developers, who receive payment based on the amount of solar energy generated (which is tied to the use of the DG or community solar customer) to recommend taking on energy efficiency projects that ultimately decrease the amount of solar energy needed.

Another barrier is the funding structure for energy efficiency programs. Because funding for these programs is closely tied to the kilowatt-hours and therms reduced, without a directive from the utilities to spend time and resources on generating awareness of solar programs, some implementers hesitate to go outside the scope of their funding.

## **Challenges related to job training and workforce development**

Illinois Solar for All has specific requirements for approved vendors to hire job trainees for a portion of their projects, with a goal of creating new solar job opportunities in the state. Although ILSFA has these specific requirements, because of the difference

in funding levels between Illinois Shines and ILSFA, it was never intended that ILSFA would be able to deliver on the full potential of the job creation envisioned in FEJA.

In addition, there is a disconnect between where FEJA job trainees are located and where both ILSFA and Illinois Shines projects are being built. Both ILSFA and Illinois Shines are statewide programs and have been successful in seeing project development across the state. However, most FEJA-funded job training organizations are in the Chicagoland area. The result is that there are FEJA funded job training graduates ready to work, but they live in the Chicagoland area and projects are being built elsewhere. While some job trainees are willing and able to travel, this mismatch creates problems both for trainees looking for work and for developers who are looking to hire, and meet their ILSFA requirements, in other parts of the State.

**2) Are there programs not currently available in Illinois, including programs adopted in other states, that could increase affordability and/or the ability of customers to receive essential levels of electric services?**

There are many different approaches that states can take toward creating customer value from solar. We discuss several:

**Net Metering and Bill Crediting**

One of the primary drivers of value to ratepayers for any kind of solar installation is net metering or bill crediting. This is true for behind-the-meter, rooftop solar and for subscribers to community solar. Generally, net metering is a method of accounting that allows solar PV system owners and operators with installations located behind their own

electrical meter to receive credit for the excess energy those systems send back to the grid. Owners receive a credit for each kilowatt-hour delivered to the grid and can draw upon accrued credits with some limitations. Net metering has been in place in Illinois since 2007 and currently provides a per kilowatt bill credit at the retail rate.<sup>9</sup> This, however, will change once Illinois utilities distributed solar capacity reaches the legislated 5% cap.

A mechanism known as virtual net metering or meter aggregation allows customers to receive similar value from renewable electric generation facilities that do not flow directly to the customer's meter. Participants typically continue to use the grid for their own individual electricity consumption and receive bill credits from their portion of a shared generation facility installed elsewhere in the utility territory. In a "virtual net metering" approach, multiple customers that subscribe to a program receive bill credits from a shared renewable energy facility in this way. Illinois' net metering rules for community solar were established with the passage of FEJA and revised the legislative requirement for net metering to create a supply-only bill crediting rate, different from Illinois' behind-the-meter retail rate.<sup>10</sup>

While net metering across the country most commonly uses a retail rate bill crediting mechanism, other methods are used to determine the value of the excess energy customer's send back to the grid. Some utilities argue that these credits should be valued at the avoided cost or wholesale rate to better compensate them for distribution costs. Customer advocates contend that DG resources provide utilities with additional value by supplying energy at peak times, when that production is most costly.

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<sup>9</sup> P.A. 95-420; 220 ILCS 5/16-107.5.

<sup>10</sup> P.A. 95-420; 220 ILCS 5/16-107.5.

This minimizes the need for transmission upgrades, new generation, and moves utilities and states further towards clean energy goals. This value-of-solar approach considers societal and environmental benefits of distributed solar, including factors like fuel savings, grid resiliency, carbon reduction benefits, line loss savings, and local economic impacts, as well as the impact of new technologies. These factors and others can adjust the implied value per kilowatt hour of solar resources. While a value of solar approach can differ by the valuation process used, with bill credits above or below the full retail rate, studies have determined that the value distributed solar provides to the grid is at or above the retail rate of electricity.<sup>11</sup>

Thirty-seven states currently have net metering rules in place that allow for retail rate bill crediting compensation. Illinois, Indiana, Kentucky, and Michigan have retail rate net metering, but are transitioning to other forms of compensation or some form of value-of-solar compensation. Arizona, Georgia, Hawaii, Indiana, Nevada, Maine and Mississippi do not have net metering, but offer alternative compensation structures for crediting excess generated energy. Other states use a value-of-solar approach resulting in different levels of compensation depending on local nuances. The net metering compensation that results in Illinois after aggregate capacity is met must be determined in a way that ensures long term value for system owners.

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<sup>11</sup> Lindsey Hallock and Rob Sargent, Environment America Research & Policy Center, *Shining Rewards: The Value of Rooftop Solar Power for Consumers and Society*, Summer 2015, <http://www.environmentamerica.org/reports/amc/shining-rewards>

## Protecting Net Metering

Protecting net metering and ensuring the greatest value to customers is critical for ensuring RPS goals are met and access to renewable energy is maintained and equitable. Net metering rules are changing across the country, impacting markets and, in some cases, the long-term financial viability of existing DG facilities. Illinois faces a challenge introduced with FEJA that requires regulators to replace retail net metering with a locational value-of-solar rate once distributed solar capacity reaches 5% of a utility's total peak demand. When capacity reaches 3%, regulators are required to begin the process for determining the value. While there is some controversy over how this capacity is calculated, Ameren's recent announcement that it believes it has reached the 5% milestone indicates that, at minimum, the valuation process must be triggered.

The outcome of this process will be **critical for the future of renewable energy and energy equity in Illinois**. The values determined will either further growth of DG markets in Illinois or thwart them. The process will consider the full value of solar to the grid, which is made more complicated with Illinois being a deregulated state.

## Interconnection reform

Current issues related to the interconnection and transmission planning processes for regional transmission organizations (RTO) can create significant barriers to renewables development. The application process for generators is complex and expensive and the RTO transmission planning processes are fragmented and discourage holistic planning across the RTO territories. Right now, for example, the MISO system can only accommodate about 7% of the projects currently in the

interconnection queue.<sup>12</sup> Proposed generation projects are required to pay the cost for transmission upgrades, which commonly results in proposed projects never being realized. The long-term RTO planning is currently based on local utility planning and does not take macro-level transmission planning into account. Current proposed reforms seek to push the RTOs to focus on larger, macro-level transmission upgrades to more effectively increase transmission capacity, which should help create a more realistic and fairer share of costs between RTOs, utilities and generators.

## **PV recycling**

While solar panels will last 25 years or longer, we are reaching a point in the U.S. where significant numbers of panels will reach the end of their life in the next ten years. As of the end of 2018, more than 6,200 MW of cumulative solar was installed across the U.S. This represents tens of millions of solar panels in the U.S. alone. The regulatory environment for recycling solar panels is piecemeal or non-existent, the industry addresses recycling purely voluntarily, and state policies are generally not yet addressing the issue. The coming glut in solar waste may produce disastrous consequences to the environment and to perceptions of the industry if unaddressed in the next few years.

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<sup>12</sup> David Thill, *As Bottleneck Stymies Projects, Midwest Groups Call for Transmission Reforms*, Midwest Energy News, January 10, 2020, <https://energynews.us/2020/01/10/midwest/as-bottleneck-stymies-projects-midwest-groups-call-for-transmission-reforms/>

## **Conclusion**

Thank you again for the opportunity to submit these comments. Elevate Energy is excited to learn from other parties' submissions in this docket and appreciate the Commission's focus on these critical issues.

Respectfully Submitted,

A handwritten signature in black ink, reading "Anne McKibbin". The signature is written in a cursive, flowing style.

Anne McKibbin  
Policy Director  
Elevate Energy